

## ABSTRACT:

A control signal ( $k_{lum}$ ) derived from the luminance component (Y) of a video signal is used to adaptively control a temporal noise reduction filter (10) according to the level of motion in a video image. To compress the control signal for storage in a memory (30), the control signal is averaged over each 2x2 pixel area, and then a non-linear

5 compression function is applied. The non-linear compression function preferably selects quantization values of the control signal which correspond to a perceptually substantially linear response in the noise reduction factor (NRF) of the noise filter (10).

(Fig.)

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